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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,884	11/12/2003	James H. Schwartz	1810A1	7379

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EXAMINER

LOPEZ, CARLOS N

ART UNIT PAPER NUMBER

1731

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,884

Applicant(s)

SCHWARTZ ET AL.

Examiner

Carlos Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,11-17,20,21,28 and 31 is/are rejected.
- 7) ☒ Claim(s) 8,10,18,19,22-27,29-30 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2 IDS's</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-6 and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "the rails" in claim 2 lacks antecedent basis. In claim 13, the phrase "the heated enclosure" lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 11-13, 15-17, 20, 21, 28, 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Nikander (WO 93/01140). Nikander discloses a method and apparatus for shaping glass. The shaping apparatus comprises an upper mold 14 and a support device deemed as element 23 comprising sidewalls and a lower wall as shown in figure 4, which supports the glass sheet 3 and it is below the upper mold as shown in figure 4. The claimed shaping rail is deemed as ring mould 20, the claimed chamber is designated by element 21 as shown in figure 4, the claimed moving device

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is deemed as means 12 moving up and down the upper mold, and the claimed connector is deemed as blower 16.

As for claim 11, the mold, support device, and chamber are within a heated enclosure 18 heated by electrical elements 23.

As for claim 12, the air supplied by blower 16 is deemed as being pressurized and further heated by heater elements 23, to thus provide the claimed step of supplying pressurized heated gas.

As for claim 13, figure 4 shows a duct being provided with the heated chamber, alternatively see figure 3 showing a pump air blower within the heated enclosure.

As for claim 15, the article being worked on by the apparatus is not deemed to provide a distinct structural feature to the apparatus. It is expected that the apparatus of Nikander is capable of shaping a stacked pair of glass sheets.

As for claim 16, the upper mold is capable of functioning as a vacuum mold.

As for claim 17, the lifting device 12 is deemed as the claimed reciprocating device.

As for claim 20, the device of Nikander performs the claimed method steps as recite in claim 20.

As for claim 21, bridging paragraph of pages 5-6 teaches that the glass is heated such that it reaches a temperature to bend the glass.

As for claim 28, the chamber includes the shaping rail as shown in figure 4.

As for claim 31, the claimed pressure would not exceed 1.5psi in the chamber of Nikander when there is no air being blown into the chamber.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 7, 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikander (WO 93/01140) in view of Kuster (US 5,992,178).

Kuster et al discloses a method and apparatus for shaping glass. The shaping apparatus comprises an upper mold 14 and a support device deemed as element 23 comprising sidewalls and a lower wall as shown in figure 4, which supports the glass sheet 3 and it is below the upper mold as show in figure 4. The claimed shaping rail is deemed as ring mould 20, the claimed chamber is designated by element 21 as shown in figure 4, the claimed moving device is deemed as means 12 moving up and down the upper mold, and the claimed connector is deemed as blower 16.

Kuster is silent disclosing the use of flexible carrier over the mold rail. However, Kuster in Col. 3, lines 28ff, teaches that fabrics are provided to over a mold (see figure 1 of Kuster) in order to help maintain the shape of the bended glass. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to have used a flexible carrier in Nikander's apparatus in order to help retain the shape of the bended glass sheet as taught by Kuster.

As for claim 9, the fabric is sufficiently flexible to allow the glass sheet to sag down in order to retain the shape of the bended glass sheet.

As for claim 14, the claimed heat resistant materials would have been obvious to a person of ordinary skill in the art to choose in order to function in the high temperature environment being exposed.

Allowable Subject Matter

Claims 8,10,18,19,22-27,29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the cited prior art fails to disclose or reasonably suggest an apparatus or method of shaping glass sheet having a flexible carrier and moving device as recited in claim 8 and 18-19 in combination with the support device, shaping rail, chamber, and connector nor does it disclose the flexible carrier arrangement as recited in claim 10, nor step of moving the lower mold as recited in claims 22-27, in combination with the claimed supporting, aligning, positioning, sealing and pressurizing steps, nor sealing the chamber as recited in claims 29 and 30.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, consisting of a stylized 'L' followed by a 'Z' and a horizontal line.

CL